

Title (en)

TORQUE SENSING DEVICE FOR A TAPER DISK WRAPAROUND DRIVE

Title (de)

DREHMOMENTFÜHLVORRICHTUNG FÜR EIN KEGELSCHLEIBENUMSCHLINGUNGSGETRIEBE

Title (fr)

DISPOSITIF DE DETECTION DU COUPLE DE ROTATION SUR UNE TRANSMISSION A COURROIE SUR POULIES CONIQUES

Publication

**EP 2002147 A1 20081217 (DE)**

Application

**EP 07721976 A 20070305**

Priority

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Abstract (en)

[origin: WO2007110026A1] A torque sensing device for a taper disk wraparound drive comprises a ramp face which is rigidly connected to a shaft of a taper disk pair, a further ramp face which is rigidly connected to a sensing piston which engages around the shaft and is axially moveable and rotatable relative to the shaft, which ramp faces are designed such that, in the event of a change in the torque acting between the sensing piston and the shaft, the axial position of the sensing piston is varied by means of balls, which are arranged between the ramp faces, rolling on the ramp faces, and a guide face which is rigidly connected to a moving disk, against the radial inner side of which guide face the balls bear, wherein the moving disk is rotationally fixedly and axially moveably connected to the shaft and, with a hydraulic pressure which is dependent on the axial position of the sensing piston, is forced against a fixed disk which is rigidly connected to the shaft, and the form face is shaped such that the radial spacing between the balls and the axis of the shaft is dependent on the axial spacing between the moving disk and the fixed disk, wherein the guide face is designed such that the contact points of in each case one ball with the ramp faces, the contact point of said ball with the guide face, and the central point of said ball are situated in a radially-aligned plane.

IPC 8 full level

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CPC (source: EP KR)

**F16H 9/18** (2013.01 - KR); **F16H 55/56** (2013.01 - KR); **F16H 61/662** (2013.01 - KR); **F16H 61/66272** (2013.01 - EP); **F16H 59/14** (2013.01 - EP); **F16H 63/065** (2013.01 - EP)

Citation (search report)

See references of WO 2007110026A1

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